

RECLAMATION

Managing Water in the West

Elk Valley Rancheria Water Resource Development Project

Crescent City, California

Final Environmental Assessment



Mission Statements

The mission of the Department of the Interior is to protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibilities to Indian Tribes and our commitments to island communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

Table of Contents

1.0 Purpose and Need	2
1.1 Introduction.....	2
1.2 Purpose and Need	3
2.0 Alternatives.....	6
2.1 Alternative 1 - No Action	6
2.2 Alternative 2 - Proposed Action	6
3.0 Affected Environment & Environmental Consequences	11
3.1 Resources Considered.....	11
3.2 Resources Not Analyzed in Detail	11
3.3 Wildlife and Vegetation	11
3.3.1 Affected Environment.....	11
3.3.2 Environmental Consequences	13
Table 3-1 Habitat Type and Impacts.....	13
3.4 Cultural Resources	14
3.4.1 Affected Environment.....	14
3.4.2 Environmental Consequences	16
3.5 Water Resources	17
3.5.1 Affected Environment.....	17
3.5.2 Environmental Consequences	17
3.6 Environmental Justice	18
3.6.1 Affected Environment.....	18
3.6.2 Environmental Consequences	19
3.7 Indian Trust Assets	20
3.7.1 Affected Environment.....	20
3.7.2 Environmental Consequences	20
4.0 Growth-Inducing, Irreversible and Irretrievable Commitments of Resources	21
4.1 Growth-Inducing Effects	21
4.2 Irreversible and Irretrievable Commitment of Resources.....	21
5.0 Consultation and Coordination	22
5.1 Federal Laws and Executive Orders	22
5.1.1 Endangered Species Act (16 USC. 1521 et seq.).....	22
5.1.2 Migratory Bird Treaty Act (16 USC § 703 ET SEQ.)	22
5.1.3 National Historic Preservation Act (16 USC 470 et seq.)	22
5.1.4 Environmental Justice (Executive Order 12898).....	22
5.2 Public Involvement	23
6.0 List of Preparers	24
7.0 References.....	25

Appendix A Photos of Project Area

1.0 Purpose and Need

1.1 Introduction

Under the *State's Emergency Drought Relief Act of 1991* as amended (Public Law [P.L.] 109-234]), the Bureau of Reclamation (Reclamation) is distributing \$40 million from the American Reinvestment and Recovery Act (ARRA) (P.L. 111-5) to fund emergency drought relief projects. In February 2009, while the State of California was in the third consecutive year of a drought, Governor Arnold Schwarzenegger declared a drought emergency. The Elk Valley Rancheria (Tribe) issued an Emergency Drought Declaration in September 2009.

The Tribe is a federally recognized Indian Tribe. The Elk Valley Rancheria (Rancheria) is located in Del Norte County, California (Figure 1). The Rancheria was established in 1906 pursuant to the *Summary Act of June 21, 1906* (34 Statute 325). At that time, Congress allocated \$100,000 for the purchase of Rancherias in California for Indian Tribes. The "Historic Rancheria" was approximately 100 acres in size (Figure 1). In 1935 the Tolowa Indians accepted the Indian Reorganization Act of 1934. In 1958, the U.S. Congress officially terminated the Elk Valley Rancheria, along with 43 others in California, after the passage of the "California Rancheria Act." In addition to revoking the Rancheria's right to self-government and other measures, the termination policy divided and transferred Rancheria properties to individual Tribal members, requiring the payment of property taxes. During the period of termination, more than half of the original 100 acres fell out of Indian ownership (BIA, 2003).

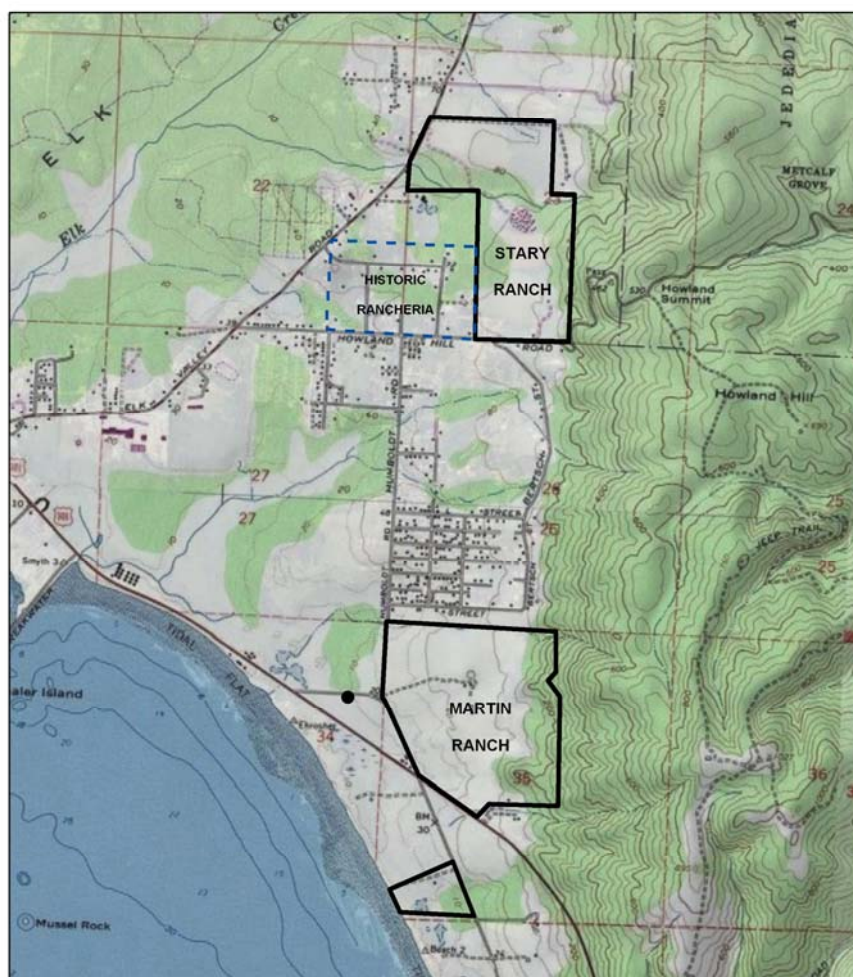
Under a decision in 1984 (*Hardwick, et al. v. United States of America, et al*) the U.S. District Court found that the reservation had not been terminated lawfully, and ordered the Secretary of the Interior to take title to the property still in ownership by any Indian and to hold the reservation in trust for the benefit of the Indian Tribe (BIA, 2003). Only five acres remained held in trust for an individual within the original Rancheria. In 1994, the Tolowa Indians established a new Tribal government under the provisions of the Indian Reorganization Act through the adoption of a Constitution that was subsequently approved by the Secretary of the Interior. In 1995, the Tribal government entered into a seven year lease agreement with Betty Green, one of the members of the Tribe who still owned property within the Rancheria that the U.S. Government had accepted into trust under the *Hardwick* judgment (Elk Valley, 2009). The Tribe constructed a gaming facility in 1995, which is the only Tribal economic development project on the Rancheria (Howard, 2010).

In 2003, the 179 acre Stary Ranch was placed into federal trust for the Tribe. This action was taken to: 1) preserve land for the eventual use as a Tribal cemetery; 2) preserve open space; 3) exercise Tribal sovereignty over land owned by the Tribal Government; and 4) to aid in the establishment of a land base for the Tribe (BIA, 2003). In 2006 the 203 acre Martin Ranch was placed into federal trust for the Tribe. The action was taken to: 1) increase employment opportunities for Tribal members; 2) improve existing Tribal housing, construction of new Tribal housing, to provide funding for governmental and other services to improve the quality of life for Tribal members; 3) provide capital for other economic development; 4) restoration of lost land base; 5) acquisition of land needed to exercise governmental powers; and 6) for economic self-sufficiency (BIA, 2006).

1.2 Purpose and Need

The purpose of the project is for Reclamation to provide ARRA funds to the Tribe for establishing new wells on Tribal land that would be used for providing water for livestock and irrigation of annual grassland/pasture. The Tribe currently receives water for drinking, livestock and irrigation of annual grassland/pasture from the City of Crescent City (City) and the Bertsch-Ocean View Community Services District (BOVCSD). The Tribe has one pipe culvert that collected water on the Stary Ranch property. The pipe culvert was used as a water supply in the 1950's and 1960's (Figure 2). There is one well on the Martin Ranch property that was drilled in the 1940's and is inoperable (Figure 3).

This environmental assessment (EA): (1) describes the existing environmental resources in the project area; (2) evaluates the effects of the alternatives (including the Proposed Action) on the resources; and, (3) proposes measures to avoid, minimize, or mitigate any adverse effects. This EA is in compliance with the National Environmental Policy Act (NEPA) and Council on Environmental Quality (CEQ) regulations (40 CFR 1500-1508). Reclamation has also prepared a Finding of No Significant Impact (FONSI) which explains why the Proposed Action will not have a significant effect on the human environment.



All maps are for general depiction purposes only.

Figure 1, Elk Valley Rancheria Lands and Vicinity



Figure 2, Inoperable Culvert Pipe



Figure 3, Inoperable Well

2.0 Alternatives

2.1 Alternative 1 - No Action

Under the No Action alternative, Reclamation would not provide funds to the Tribe under ARRA for the purposes of establishing wells on Tribal land that could have provided water for livestock and irrigation of annual grassland/pasture.

2.2 Alternative 2 - Proposed Action

The Proposed Action is for Reclamation to provide ARRA funds to the Tribe for the purposes of establishing wells on Tribal land that would be used for providing water for livestock and irrigation of annual grassland/pasture. The project area consists of Tribal lands on the Stary Ranch and Martin Ranch (Figure 1).

The Tribe could fund and install water pipelines, overhead electrical power, and 5,000 gallon water storage tanks, separate from Reclamation's funding. Because these activities are *connected actions* (40 CFR 1508.25(a)) to the well drilling and do not have independent utility, the impacts associated with water pipelines, electrical power, and water storage tanks have been considered in this EA.

Work Period. All elements of the Proposed Action would take place between May and October 2010 or during the same period in 2011. Work could extend later in the year, but would generally not occur once two inches of rainfall has occurred. Total time to implement the Proposed Action is estimated to be between 60 and 90 days.

Test Wells. Six test wells would be drilled on each property, for a total of 12 test wells. All work would occur within existing annual grassland/pasture (Figures 4 and 5). Because project-level design plans for the test wells have not been completed, this EA considers the worst-case scenario. The test wells are anticipated to be 12 inches in diameter, and would be approximately 100 feet deep. The Tribe is seeking to have three production wells on each property. The desired output is six to 10 gallons per minute (gpm) each. After each test well is drilled, water quality testing would be performed by an Environmental Protection Agency certified laboratory. Tests would be performed to determine the levels of mercury, dioxins, arsenic, lead, *E. coli*, turbidity, and other water-borne pathogens and toxins. Test holes determined not to be developable would be capped with gravel and concrete, and abandoned in place per applicable health department requirements. Once a test well has been approved (passing water quality testing, meets minimum gpm), a submersible pump and housing would be installed.

Access to the test well sites would be along existing roads and through annual grassland/pasture. There are approximately 143 acres of annual grassland/pasture which have been identified where the test wells could go. This area includes all staging and access. The work area for the test wells could total up to 2,500 square feet. Each test well site would be considerably smaller (approximately 225 square feet each). No improvements to existing roads would be needed, and no new roads would be constructed (Figures 4 and 5).

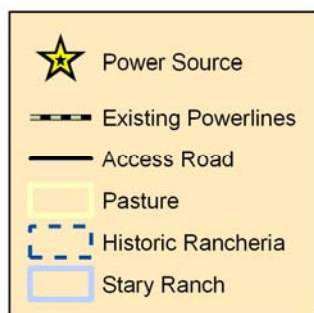
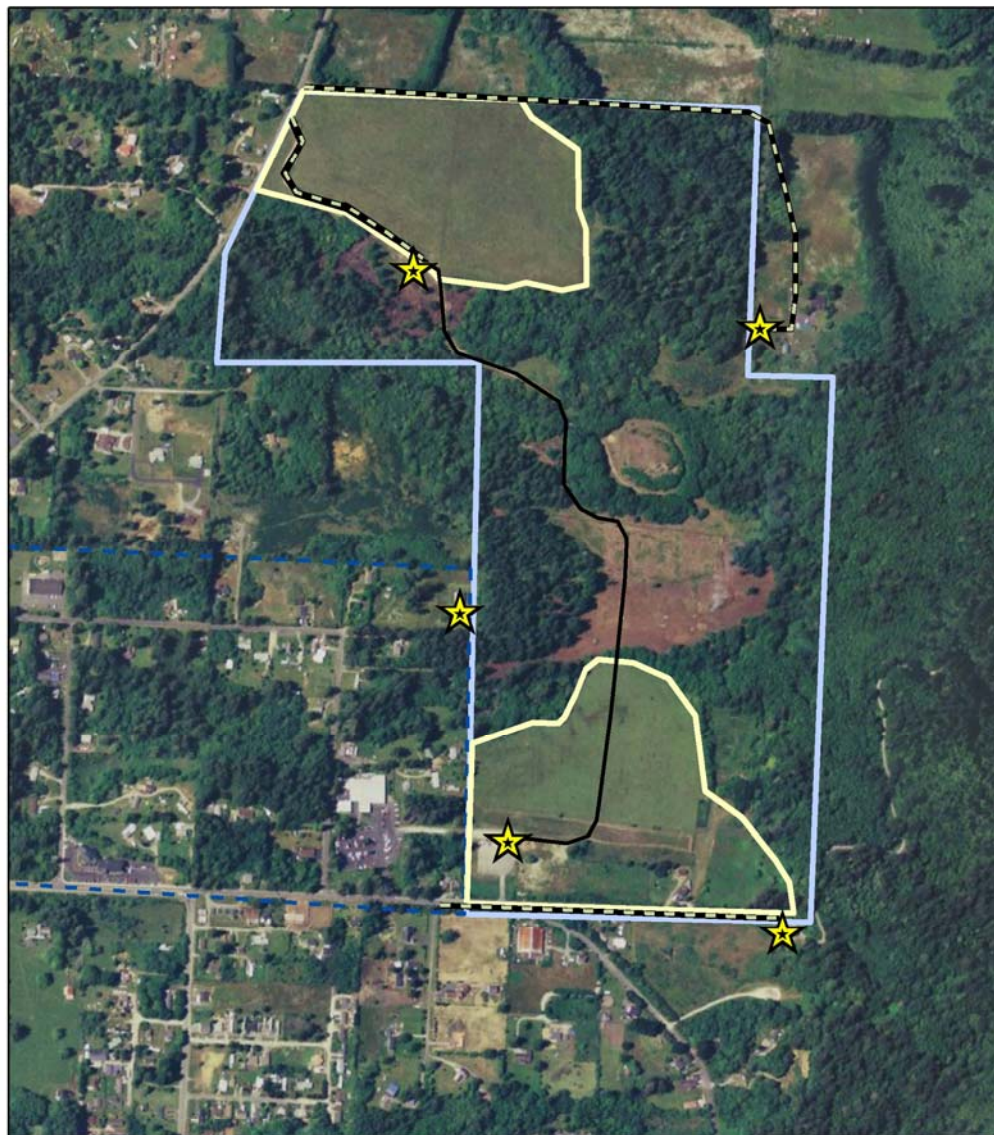


Figure 4, Existing Infrastructure and Pasture

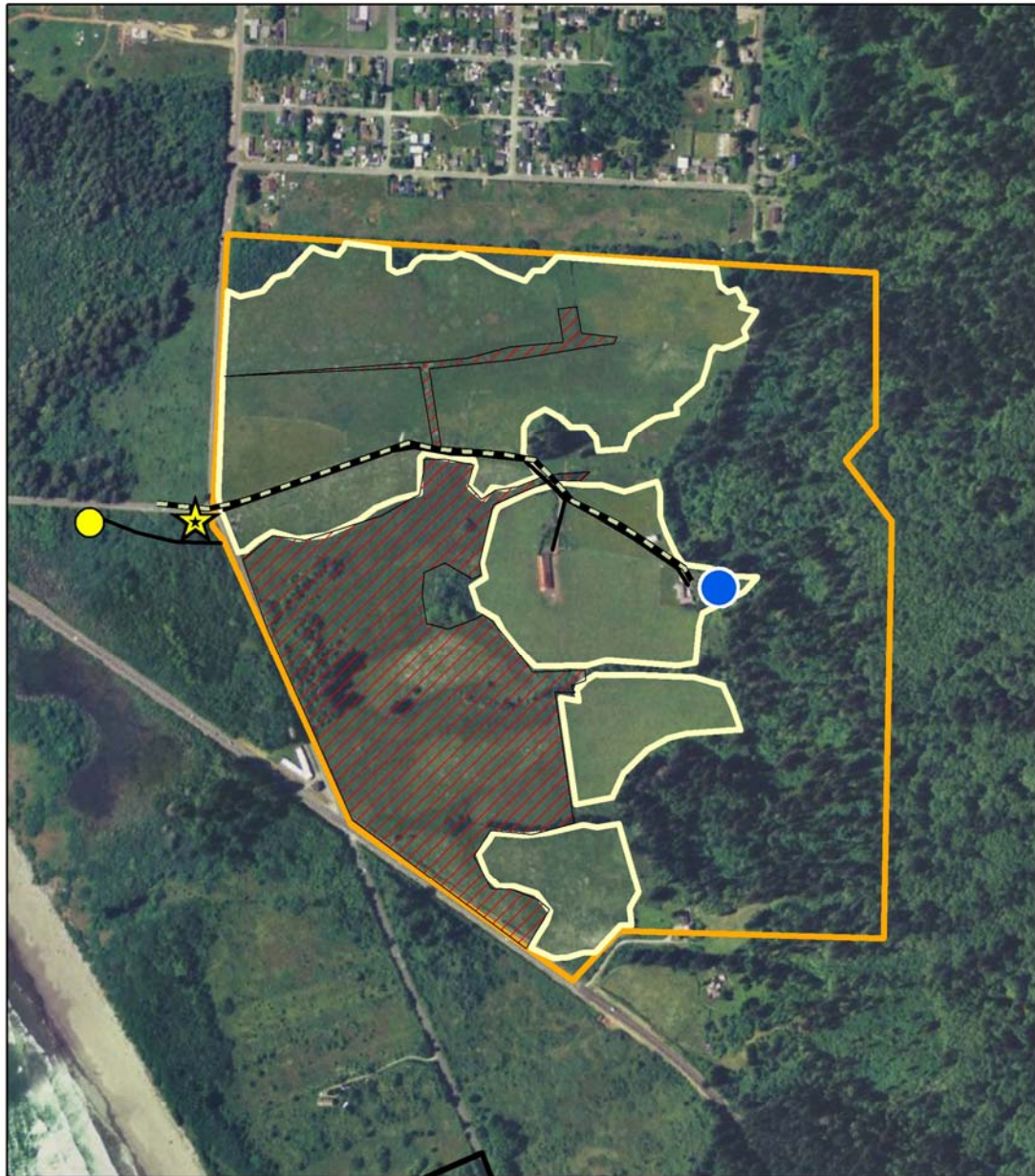


Figure 5, Existing Infrastructure and Pasture

Improve an Existing Well. There is an inoperable well west of the Martin Ranch property and south of Sandmine Road that would be investigated to see if the well can be made functional again (Figure 3). The well was originally drilled in the 1940's. The well is not connected to water pipelines and does not have electrical power. If the well is able to made operational, water pipelines, overhead power supply, submersible pump and housing could be installed (Elk Valley, 2009). Access to this well is from an existing right of way west of Humboldt Road (Figure 5). Some vegetation removal and minor grading may need to take place to make the site fully accessible (Howard, 2010a). The length of the right of way is approximately 650 feet. The size of the work area has been considered under Test Wells above.

Power Supply and Water Pipelines. For those test well sites that are determined to be operable (passing water quality testing, meets minimum gpm), underground water pipelines and overhead powerlines would be connected. All work would occur from existing access roads, and within annual grassland/pasture. Approximately 143 acres of annual grassland/pasture has been identified where pipelines and/or powerlines could be placed. Because project-level design plans for the construction of pipelines and powerlines has not been completed, this EA considers the worst-case scenario. Ideally production wells would be placed near existing power sources, minimizing the need for lengthy powerlines and pipelines. No improvements to existing roads would be made, and no new roads would be constructed. No construction would occur within streams, riparian corridors or wetlands, and a minimum 200 foot buffer would be maintained adjacent to these areas.

Electrical power would be supplied by Pacific Power. Existing powerlines and other power sources are depicted in Figures 4 and 5. It is anticipated that there could be up to 7,537 feet of overhead powerlines installed. Poles would be placed every 250 to 300 feet along the transmission lines. Up to 25 poles could be installed. Pole sites would not exceed 25 square feet each. The poles, up to 60 feet in height and no more than 3 feet, 5 inches in diameter, would be placed in the ground to approximately 14 feet in depth. Generally powerlines and poles are installed in three steps: (1) vehicles traverse the transmission line corridor delivering materials at each structure site, such as poles, steel, hardware, etc; (2) once the materials are at each site, the structures are assembled prior to erection; and (3) the structures generally are erected with a large crane. The majority of the extracted dirt would be backfilled and compacted to support the poles. Wood poles could be further stabilized by guy wires anchored 50 to 60 feet from the pole's base. Electrical wires would be strung on these poles. Typical construction equipment could include a drill rig, grader, backhoe, loader, dozer, aerial lift truck, line trucks, pole and cable trucks, utility trucks, puller/tensioners, and a crane. The work area for powerline and pole installation would be a corridor 20 feet in width.

Water pipelines would be installed to convey water to storage tanks, livestock troughs, and outlets for irrigation of annual grassland/pasture. Pipelines would be two to four inches in diameter, and would be placed approximately two to four feet deep. Trenches two to three feet wide would be excavated using a backhoe or similar equipment. Once the pipeline is placed, soil would be placed back on top and compacted. Up to 7,537 feet of water pipelines could be installed. The work area for pipeline installation would be a corridor 15 feet in width.

Water Storage Tanks. The Tribe may also install 5,000 gallon water storage tanks at three of the production well sites. A fourth storage tank could be located on the eastside of the Martin Ranch property (Figure 5). Because project-level design plans for the water storage tanks have not been completed, this EA considers the worst-case scenario. The work area for each storage tank could be up to 2,500 square feet, including a permanent gravel pad on which each tank would be placed (no more than 225 square feet). The storage tanks would be purchased from a commercial vendor and most likely made of polyethylene material.

3.0 Affected Environment & Environmental Consequences

3.1 Resources Considered

Evaluation of the Proposed Action indicates the following resources could be affected by the project:

- wildlife and vegetation
- cultural resources
- water resources
- environmental justice
- Indian Trust Assets

Analysis of effects is based upon NEPA's *context* and *intensity* as described in 40 CFR 1508.27.

3.2 Resources Not Analyzed in Detail

Evaluation of the Proposed Action indicates that there would be little to no indirect, direct or cumulative effects on several resources. The resources include:

- air quality
- geology and soils
- hazards and hazardous materials
- noise
- mineral resources
- traffic and transportation
- recreation
- agricultural resources
- land use
- public services
- utilities
- climate change
- socioeconomics

As a result, these resources are not discussed further in this EA.

3.3 Wildlife and Vegetation

3.3.1 Affected Environment

Setting. The Rancheria is located between mountains of the California Coast Range and the Pacific Ocean. The Tribal lands are located at approximately 20 to 100 feet above sea level.

Vegetation consists of Sitka spruce, coast redwood, and red alder communities. Aquatic habitats include intermittent drainages and perennial streams. The project area also consists of developed areas for housing/buildings, and annual grassland/pasture for livestock. A small portion of the Stary Ranch property is the site of a small rock quarry and a separate portion is used for overflow parking for the casino (currently located within the parcel depicted in Figure 1 as “Historic Rancheria”). A portion of the Martin Ranch property has been delineated as “wetland prairie.”

Vegetation. Sitka spruce and red alder/mixed deciduous habitat is found scattered in between developed areas and annual grassland/pasture throughout the Rancheria. This habitat consists of Sitka spruce (*Picea sitchensis*) and grand fir (*Abies grandis*). Below the canopy, vegetation consists of western sword fern (*Polystichum munitum*), bracken fern (*Pteridium aquilinum*) and California blackberry (*Rubus ursinus*). Red alder/mixed deciduous habitat is found along drainage corridors and other wet areas. Vegetation includes red alder (*Alnus rubra*) trees, scattered Sitka spruce, California blackberry, thimbleberry (*Rubus parviflorus*) and horsetail (*Equisetum* sp.). About half of the Tribal lands are annual grassland/pasture which includes plant species such as hawkweed (*Hieracium* sp.), Bermuda grass (*Cynodon dactylon*), common mallow (*Malva neglecta*) and white-stemmed filaree (*Leucanthemum vulgare*) (BIA, 2006).

Wetlands. In 2005 as a part of the *Environmental Impact Statement for the Elk Valley Rancheria Martin Ranch Fee to Trust and Casino Project*, Analytical Environmental Services consulted with the U.S. Army Corps of Engineers for a Section 404 permit on jurisdictional waters of the U.S. and wetlands. Approximately 33 acres, mostly in the westside of the mid-section of the Martin Ranch property, was determined to be jurisdictional wetlands (“riparian wetland” and “wetland prairie”) (BIA, 2006). There are no wetlands, however, on the Stary Ranch property (BIA, 2003).

Wildlife. A variety of wildlife may use the habitats that occur on the Rancheria. The following are typical of the animals found along the Coast Range: Roosevelt elk (*Cervus elaphus roosevelti*), black-tailed deer (*Odocoileus hemionus columbianus*), brush rabbit (*Sylvilagus bachmani*), western garter snake (*Thamnophis elegans*), red-tailed hawk (*Buteo jamaicensis*), Stellar’s jay (*Cyanocitta stelleri*), and northern red-legged frog (*Rana aurora aurora*). Other common animals include: raccoon (*Procyon lotor*), opossum (*Didelphis virginiana*), and Pacific chorus frog (*Pseudacris regilla*).

Special-Status Species. The California Natural Diversity Database (CNDDB) and U.S. Fish and Wildlife Service websites were reviewed for the potential occurrence of federally-listed special-status species. Based on known observations and the absence of suitable habitat, only one special-status plant has the potential to be found in the project vicinity. The western lily (*Lilium occidentale*), federally listed as endangered, has been documented approximately one-half mile southwest of the Stary Ranch property, and one-third mile southwest of the Martin Ranch property. No special-status wildlife species have been recorded within a six mile radius of the project area (CNDDB, 2010, USFWS, 2010, BIA, 2003 and BIA, 2006).

3.3.2 Environmental Consequences

No Action

Under the No Action alternative, Reclamation would not provide funds under ARRA for the purposes of establishing wells on Tribal land that could have provided water for livestock and irrigation of annual grassland/pasture. There would be no impacts to wildlife and vegetation under the No Action alternative.

Proposed Action

The Proposed Action would be to drill 12 test wells and make six of those wells operational, including an existing well (if possible). The proposed well sites are located within existing annual grassland/pasture (Figures 4 and 5).

Vegetation. All elements of the Proposed Action would occur within annual grassland/pasture. This habitat is relatively abundant, lacks plant diversity, and is dominated by non-native plants. As described in Table 3-1, there would be permanent loss of .05 acre of annual grassland/pasture as a result of the Proposed Action. Loss of this habitat would have a negligible impact on vegetation in the project area.

Table 3-1 Habitat Type and Impacts

Activity	Habitat Type	Temporary Impact	Permanent Impact
Water storage tanks	Annual grassland/pasture	10,000 square feet (sq ft)/ .21 acre	900 sq ft/.01 acre
Test wells/well sites	Annual grassland/pasture	30,000 sq ft/.65 acre	1,350 sq ft/.03 acre
Overhead powerlines/poles	Annual grassland/pasture	150,740 sq ft/3.2 acres	625 sq ft/.01 acre
Water pipelines	Annual grassland/pasture	113,055 sq ft/2.5 acres	None
Totals	Annual grassland/pasture	6.56 acres	.05 acre

Wetlands. A portion of the Martin Ranch has been delineated as prairie wetlands. All jurisdictional wetlands would be avoided by a minimum 200 foot buffer. The Proposed Action would have no impact on wetlands.

Wildlife. During construction, there would be a minor increase in personal and vehicle traffic. Annual grassland/pasture is considered to be low quality wildlife habitat. Due to the disturbed nature, wildlife use of these areas is primarily for foraging and migration purposes only. Wildlife are unlikely to nest or den in the annual grassland/pasture. During construction, wildlife

are likely to avoid foraging or migrating through the area. The result is to have a temporary, negligible impact on wildlife.

Special-Status Species. The project area lacks suitable habitat and documented observations of special-status species. The Proposed Action would have no impact on special-status species.

Cumulative Effects

The Proposed Action consists of a short-term project for the purposes of establishing new wells on Tribal lands that would be used for providing water for livestock and irrigation of annual grassland/pasture. The new wells would be connected to overhead powerlines and water would be conveyed to storage tanks by underground pipelines. The result of this project is a permanent loss of .05 acre of annual grassland/pasture. In 2006, BIA released the *Final Environmental Impact Statement for the Elk Valley Rancheria Martin Ranch Fee to Trust and Casino Project*. Under the Preferred Alternative, there would be a permanent loss of 9.3 acres of annual grassland/pasture. Due to the economic downturn in the U.S., this project has been put on hold. Combined these two projects would result in the permanent loss of 9.35 acres of annual grassland/pasture. This habitat type is considered to be relatively abundant regionally and locally, and is not a sensitive resource considering the high level of disturbance (cattle grazing) and abundance of non-native plants. The Proposed Action would, therefore have no significantly cumulative impacts on wildlife and vegetation.

3.4 Cultural Resources

3.4.1 Affected Environment

A cultural resource is a broad term that includes prehistoric, historic, architectural, and traditional cultural properties. The National Historic Preservation Act (NHPA) of 1966 is the primary Federal legislation that outlines the Federal Government's responsibility to cultural resources. Section 106 of the NHPA requires the Federal Government to take into consideration the effects of an undertaking on cultural resources listed on or eligible for inclusion in the National Register of Historic Places (NRHP). Those resources that are on, or eligible for inclusion on, the NRHP are referred to as historic properties.

The Section 106 process is outlined in the Federal regulations at 36 Code of Federal Regulations (CFR) Part 800. These regulations describe the process that the Federal agency (Reclamation) takes to identify cultural resources and the level of effect that the proposed undertaking will have on historic properties. In summary, Reclamation must first determine if the action is the type of action that has the potential to affect historic properties. If the action is the type of action to affect historic properties, Reclamation must identify the area of potential effects (APE), determine if historic properties are present within that APE, determine the effect that the undertaking will have on historic properties, and consult with the State Historic Preservation Office (SHPO), to seek concurrence on Reclamation's findings. In addition, Reclamation is required through the Section 106 process to consult with Indian Tribes concerning the identification of sites of religious or cultural significance, and consult with individuals or groups who are entitled to be consulting parties or have requested to be consulting parties.

Ethnography and Prehistoric Background. Before sustained Euro-American settlement in the 1850's, the Tolowa Indians, speakers of an Athabascan language, lived in the Crescent City area. The Tolowa territory extended along the coast from the Winchuck River in southern Oregon southward to Wilson Creek, encompassing the entire Smith River watershed. The coastal strip was the primary focus of settlement and land-use activities, as it provided a year-round supply of shellfish, sea mammals, fish, sea birds and edible seaweed. During late summer and fall Tolowa families moved inland to collect acorns and to catch salmon and eel. Most hunting and gathering activities occurred within a ten to fifteen mile radius of the principal villages (BIA, 2003).

Prehistoric Resources. The first systemic archeological investigations along the north coast of California were reported in L.L. Loud's 1918 reconnaissance survey of Humboldt Bay and the lower reaches of the Mad and Eel Rivers. Loud recorded 172 sites, one of which was the site of the Wiyot Village of Tolowot, located on Gunther Island in Humboldt Bay. Artifacts discovered at this site include bone and antler harpoon points, woodworking tools such as adzes, wedges, and mauls, *Dentalium* shells, ceremonial obsidian blades, and groundstone zoomorphs. In Del Norte County, a Gunther Pattern site has been identified at Point St. George north of Crescent City (BIA, 2006).

Historic Background. The historical period for the area begins with the explorations of the Spanish explorer Bruno de Heceta in 1775. Later in 1828, Jedediah Smith passed through the area while attempting to find a route to the coast from Central California (BIA, 2006).

Elk Valley was named in late 1852 by the early land exploration party headed by James Brookings of Oregon. The expedition sought to establish an American town on the northern California coast to supply the gold diggings of the interior. Soon after, Crescent City was established, with pack trains passing through Elk Valley enroute to Oregon. Two of these early historic pack routes, the Cold Spring Mountain Trail and Kelsey Trail, passed easterly through Elk Valley in the vicinity of Stary Ranch. In 1858 a plank road from Crescent City was completed, passing northeasterly through Elk Valley toward Sailors Creek, Oregon. The Gasquet Road was completed in 1887, connecting with Crescent City Plan road in Elk Valley (BIA, 2003).

With the influx of settlers here and elsewhere in Northern California, the resulting demand for wood led to the large-scale logging of nearby redwood forests. The first sawmill in Del Norte County was established in 1853. By the 1880's, Crescent City was a well-established town with a population of 1,000 people (BIA, 2006).

Historic Resources. The earliest American settlers of Elk Valley catered to the packing trade by offering grazing land for mules, room and board for travelers, and raising vegetables and other foodstuff. Located on Stary Ranch was one of the earliest prominent stopping places known as the Jordan-Mavity-Howland ranch. Also located on the Stary Ranch is the former site of the Hobbs, Wall and Company Camp Number 10, dating from circa 1909 to 1920 (BIA, 2003).

Identification. The entirety of the Stary Ranch was surveyed for cultural resources in 1986 by Roscoe and Eidsness. The entirety of the Martin Ranch was surveyed for cultural resources in

2002 by Heald. Only one prehistoric isolate, a projectile point fragment, was identified with the APE at Stary Ranch. No other cultural material was identified and the projectile point fragment was collected.

Two historic sites were identified within the APE at Martin Ranch: the Steiger Homestead (CA-DNO-214H), which includes a prehistoric component; and a segment of historic trail just east of site CA-DNO-214H. The Steiger Homestead was recorded in 1980. At that time, the site included a house with wood frame construction and shiplap siding, as well as two sheds or outbuildings. Since then, the residence and a nearby shed have been demolished. During the 2002 investigation, other features not included in the original 1980 survey were recorded, including a large dairy barn dating back to 1910, corrals, shed, and historic era trash. It was also noted that site CA-DNO-214H also had evidence of prehistoric occupation. One chert flake, two cobble core choppers, and a projectile point fragment were identified on and around a conical knoll north of the homestead site (Heald, 2002; BIA, 2006). The dairy barn burned down after 2002.

The 2,000-foot long portion of historic trail, most likely associated with the Crescent City-Klamath Trail, is oriented north-south and is situated east of the homestead site (Heald, 2002; BIA, 2006).

All three cultural resources will be avoided by all project activities. Therefore, Reclamation did not apply the National Register of Historic Places eligibility criteria. Given that the identified cultural resources within be excluded from the construction zone in the APE, Reclamation determined that no historic properties will be affected by project implementation.

Consultation. Reclamation sent a letter to the Elk Valley Rancheria on April 13, 2010 to invite their assistance in identifying sites of religious and cultural significance pursuant to the regulations at 36 CFR 800.3(f)(2) and 36 CFR Part 800.4(a)(4). Reclamation consulted with the Tribal Historic Preservation Officer (THPO) on May 3, 2010 regarding this undertaking and a finding of no historic properties affected pursuant to 36 CFR Part 800.4(d)(1). The THPO concurred with Reclamations' findings and determination on May 7, 2010.

3.4.2 Environmental Consequences

No Action

Under the No Action alternative, Reclamation would not provide funds under ARRA for the purposes of establishing wells on Tribal land that could have provided water for livestock and irrigation of annual grassland/pasture. Conditions related to cultural resources would remain the same as existing conditions. There would be no impacts to cultural resources under the No Action alternative.

Proposed Action

The Proposed Action consists of establishing new wells on Tribal lands for livestock and irrigation of annual grassland/pasture. Elements of the Proposed Action include drilling test

wells, developing test wells into production wells, installing underground pipelines and overhead powerlines, and installing water storage tanks.

The Proposed Action is the type of activity that has the potential to affect historic properties. One prehistoric isolate and two historic sites were identified within the project area. These sites will be avoided by all project activities. Since no historic properties will be affected, no cultural resources will be impacted as a result of implementing Proposed Action.

Cumulative Effects

The Proposed Action has the potential to affect cultural resources on the Rancheria. Reclamation determined that no historic properties will be affected by project implementation given that the three identified cultural resources identified within the APE will be excluded from the construction zone.

3.5 Water Resources

3.5.1 Affected Environment

Surface Water. The Rancheria is located in the Lower Smith River Hydrological Unit as determined by the U.S. Geological Service. Runoff in the area goes into the Pacific Ocean, approximately one and one-half miles west of the Stary Ranch Property, and one-quarter mile west of the Martin Ranch Property. Various areas of the Smith River drainage have the potential to flood, depending on elevation and proximity to streams and floodplains. For the most part, substantial streams have been controlled by the construction of diversion systems. The Rancheria is not located within a 100-year floodplain (BIA, 2006). The nearest stream to the Stary Ranch property is Elk Creek, approximately .70 mile west of the project area, which drains runoff from Elk Valley west to the Pacific Ocean. One minor tributary of Elk Creek runs through a portion of this property.

Groundwater. The Rancheria is located in the Smith River Plain Groundwater Basin. The Basin is a 70 square mile coastal basin drained by the Smith River. This Basin consists mostly of younger alluvium. Coastal geology significantly affects the availability and quality of groundwater. The uppermost stratum of rock, contained in the Battery Formation, is approximately 35 feet thick, and consists of stream gravels which are conducive to high levels of water withdrawal and recharge. Wells closer to the Pacific Ocean are susceptible to saltwater intrusion. Wells in the project area are high in iron sulfates. Yields range from an average of 50 gallons per minute to up to 500 gallons per minute (BIA, 2006). Wells in the project vicinity average 30 feet in depth (Elk Valley, 2009).

3.5.2 Environmental Consequences

No Action

Under the No Action alternative, Reclamation would not provide funds under ARRA for the purposes of establishing wells on Tribal land that could have provided water for livestock and

irrigation of annual grassland/pasture. There would be no impacts to surface water resources under the No Action alternative.

Proposed Action

The Proposed Action consists of establishing new wells on Tribal lands for livestock and irrigation of annual grassland/pasture. Elements of the Proposed Action include drilling test wells, developing test wells into production wells, installing underground pipelines and overhead powerlines, and installing water storage tanks. Construction activities include drilling, excavation and trenching which have the potential to increase sedimentation into surface waters. Best management practices will be implemented, which includes carrying out the work prior to the rainy season. A buffer of 200 feet will be maintained adjacent to streams, riparian corridors and wetlands.

The Tribe is proposing to have three production wells on each property, with an output of six to 10 gallons per minute each. There would be a minor increase in the amount of groundwater removed from the aquifer.

Cumulative Effects

The Proposed Action consists of a short-term project for the purposes of establishing new wells on Tribal lands that would be used for providing water for livestock and irrigation of annual grassland/pasture. The new wells would be connected to overhead powerlines and water would be conveyed to storage tanks by underground pipelines. Increased draft of groundwater could have a minor impact on the amount of groundwater available. However, high precipitation in the region (60 to 80 inches per year) combined with soils that are conducive to rapid recharge, make it unlikely that increased draft from groundwater would cause any long-term decline.

The existing casino on the Rancheria receives potable water from the City and the BOVCSD. The casino has an annual average demand of 5,500 gallons per day. Under the Preferred Alternative in BIA's 2006 *Final Environmental Impact Statement for the Elk Valley Rancheria Martin Ranch Fee to Trust and Casino Project*, the casino and hotel development is projected to demand 85,500 gallons per day. The City and BOVCSD receive water from the aquifer below the Smith River, which has been determined to be adequate for the size of the project, the large watershed, and that the Smith River adequately recharges the aquifer (BIA, 2006). None of the groundwater obtained by the Proposed Action would be used for the new casino and hotel development. The Proposed Action would have no significantly cumulative impacts on surface or groundwater.

3.6 Environmental Justice

3.6.1 Affected Environment

According to the U.S. Census in 2000, Del Norte County had a population that was made up of 78% white, as compared to 75% for the rest of the U.S. The County had a population that was made up of 6% American Indian, as compared to 0.9% for the rest of the U.S. The median family

income was \$22,058, as compared to \$50,046 for the rest of the U.S. Thirty-six percent of the County population was below the poverty level (US Census, 2010). Del Norte County is one of the poorest counties in California. Mining, timber and fishing once supported the economic basis of the county. Recreation and tourism is the primary tax base today. According to the U.S. Census in 2000, the Rancheria had a population of 77, of which 43% were white. The median family income on for the Tribe is \$18,750, with 26% of the population below the poverty level (BIA, 2006).

3.6.2 Environmental Consequences

No Action

Under the No Action alternative, Reclamation would not provide funds under ARRA for the purposes of establishing wells on Tribal land that could have provided water for livestock and irrigation of annual grassland/pasture. There would be no impacts to environmental justice under the No Action alternative.

Proposed Action

The Proposed Action consists of establishing new wells on Tribal lands for livestock and irrigation of annual grassland/pasture. Elements of the Proposed Action include drilling test wells, developing test wells into production wells, installing underground pipelines and overhead powerlines, and installing water storage tanks. There would be a negligible increase in employment and income for the Tribe associated with this project, which would be entirely beneficial. The Proposed Action would not disproportionately affect minority or low-income communities.

Cumulative Effects

The Proposed Action consists of a short-term project for the purposes of establishing new wells on Tribal lands that would be used for providing water for livestock and irrigation of annual grassland/pasture. The new wells would be connected to overhead powerlines and water would be conveyed to storage tanks by underground pipelines. The gaming operation on the Rancheria is the Tribe's main employer and source of income. The Proposed Action would not negatively or disproportionally affect minority or low income populations. Enhancing the existing livestock and agricultural operations could have a minor beneficial impact on environmental justice by ensuring the continued employment and revenue from these activities for the Tribe. Under the Preferred Alternative in BIA's 2006 *Final Environmental Impact Statement for the Elk Valley Rancheria Martin Ranch Fee to Trust and Casino Project.*, a new casino, hotel, conference center, parking facility would be developed. Due to the economic condition in the U.S., this project is currently on hold. However, if developed, it would represent a significant beneficial impact on environmental justice by boosting employment and income for the Tribe.

3.7 Indian Trust Assets

3.7.1 Affected Environment

Indian Trust Assets (ITAs) are legal interests in property or rights held in trust by the United States for Indian Tribes or individuals. Trust status originates from rights imparted by treaties, statutes, or executive orders. These rights are reserved for, or granted to, tribes. Reclamation's policy is to protect ITAs from adverse impacts resulting from Reclamation programs and activities whenever possible. Types of action that could affect ITAs include an interference with the exercise of a reserved water right, degradation of water quality where there is a water right or noise near a land asset where it adversely affects uses of the reserved land. The Elk Valley Rancheria is an ITA and consists of approximately 400 acres of federal trust land.

3.7.2 Environmental Consequences

No Action

Under the No Action alternative, Reclamation would not provide funds under ARRA for the purposes of establishing wells on Tribal land that could have provided water for livestock and irrigation of annual grassland/pasture. There would be no impacts to ITAs under the No Action alternative.

Proposed Action

The Proposed Action consists of establishing new wells on Tribal lands for livestock and irrigation of annual grassland/pasture. Elements of the Proposed Action include drilling test wells, developing test wells into production wells, installing underground pipelines and overhead powerlines, and installing water storage tanks. Enhancing the existing livestock operations could have a minor beneficial impact on the Tribal land by ensuring continued employment and revenue from these activities. Reclamation has determined that the Proposed Action would not impact the Elk Valley Rancheria (an ITA).

Cumulative Effects

The Proposed Action consists of a short-term project for the purposes of establishing new wells on Tribal lands that would be used for providing water for livestock and irrigation of annual grassland/pasture. The new wells would be connected to overhead powerlines and water would be conveyed to storage tanks by underground pipelines. The Proposed Action would have no cumulative impact on ITAs. Under the Preferred Alternative in BIA's 2006 *Final Environmental Impact Statement for the Elk Valley Rancheria Martin Ranch Fee to Trust and Casino Project*, a new casino, hotel, conference center, and parking facility would be developed. If developed, this project would represent a significant beneficial impact by boosting employment and income to the Tribe.

4.0 Growth-Inducing, Irreversible and Irretrievable Commitments of Resources

4.1 Growth-Inducing Effects

The Proposed Action would be for Reclamation to provide ARRA funds to the Tribe for the purposes of establishing wells on Tribal land that would be used for providing water for livestock and irrigation of annual grassland/pasture. The Tribe would also install water pipelines and electrical power to each well site. The water obtained from the wells would be for the purposes of supplementing the existing livestock and agricultural activities on the Rancheria. The Proposed Action would not directly remove obstacles to growth, result in population increases, or encourage and facilitate other activities that could significantly affect the environment. It is anticipated that land use in the project area would remain the same; therefore, there would be no growth-inducing effects as a result of construction of the proposed alternative.

4.2 Irreversible and Irretrievable Commitment of Resources

The Proposed Action would be for Reclamation to provide ARRA funds to the Tribe for the purposes of establishing wells on Tribal land that would be used for providing water for livestock and irrigation of annual grassland/pasture. The Tribe would also install water pipelines and electrical power to each well site. There would be irreversible and irretrievable commitment of resources during the installation and operation of the new wells. The installation would require equipment such as a drill rigs, excavator, and backhoe which consumes fossil fuels, and water pipeline and submerged pumps which consumes metals such as aluminum and copper. For the operation of the wells, electrical supplied to the wells requires energy that could be supplied by hydropower, renewable sources, or burning of fossil fuels. The water storage tanks would be purchased from a commercial vendor, and most likely made from polyethylene material which consumes fossil fuels.

5.0 Consultation and Coordination

5.1 Federal Laws and Executive Orders

The following federal laws were considered during the preparation of this EA and the evaluation of the potential impacts from the Proposed Action.

5.1.1 Endangered Species Act (16 USC. 1521 et seq.)

Section 7 of this Act requires Federal agencies to ensure that all federally associated activities within the United States do not jeopardize the continued existence of threatened or endangered species or result in the destruction or adverse modification of the critical habitat of these species. Action agencies must consult with the U.S. Fish and Wildlife Service, which maintains current lists of species that have been designated as threatened or endangered, to determine the potential impacts a project may have on protected species. Reclamation has determined that the Proposed Action would have “no effect” on federally proposed or listed threatened and endangered species or their proposed or designated critical habitat. No further consultation is required under Section 7 of the Endangered Species Act.

5.1.2 Migratory Bird Treaty Act (16 USC § 703 ET SEQ.)

The Migratory Bird Treaty Act implements various treaties and conventions between the U.S. and Canada, Japan, Mexico and the former Soviet Union for the protection of migratory birds. Unless permitted by regulations, the Act provides that it is unlawful to pursue, hunt, take, capture or kill; attempt to take, capture or kill; possess, offer to or sell, barter, purchase, deliver or cause to be shipped, exported, imported, transported, carried or received any migratory bird, part, nest, egg or product, manufactured or not. Subject to limitations in the Act, the Secretary of the Interior (Secretary) may adopt regulations determining the extent to which, if at all, hunting, taking, capturing, killing, possessing, selling, purchasing, shipping, transporting or exporting of any migratory bird, part, nest or egg would be allowed, having regard for temperature zones, distribution, abundance, economic value, breeding habits and migratory flight patterns. The project does not include removal of trees that could have an effect on migratory birds.

5.1.3 National Historic Preservation Act (16 USC 470 et seq.)

The National Historic Preservation Act (NHPA) of 1966 is the primary Federal legislation which outlines the Federal Government’s responsibility to cultural resources. Section 106 of the NHPA requires the Federal Government to take into consideration the effects of an undertaking listed on cultural resources on or eligible for inclusion in the National Register of Historic Places (National Register). Those resources that are on or eligible for inclusion in the National Register are referred to as historic properties.

5.1.4 Environmental Justice (Executive Order 12898)

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority and Low-Income Populations, as amended, directs federal agencies to develop an Environmental Justice

Strategy that identifies and addresses disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations. According to the Council on Environmental Qualities guidance, agencies should consider the composition of the affected area to determine whether minority populations, low-income populations, or Indian tribes are present in the area affected by the Proposed Action, and if so where there may be disproportionately high and adverse environmental effects. The Proposed Action could have a negligible beneficial impact on environmental justice by temporarily increasing employment and income during installation of the new wells. The Proposed Action would support the continued livestock and agricultural activities on Tribal lands, ensuring the continuation of employment and income associated with these operations, which would be entirely beneficial.

5.2 Public Involvement

The Draft EA and FONSI had been made available on April 14, 2010. The public comment period closed on April 29, 2010. No comments were received.

The Final EA and FONSI have been posted on Reclamation's Mid-Pacific Region NEPA website at: http://www.usbr.gov/mp/nepa/nepa_projdetails.cfm?Project_ID=5436

6.0 List of Preparers

Brian L. Buttazoni, Natural Resources Specialist

Amy Barnes, Archeologist

Shelly Hatleberg, Natural Resources Specialist

Patricia Rivera, Native American Affairs Specialist

7.0 References

- California Natural Diversity Database (CNDDB). 2010. Accessed CNDDB/ArcMap geospatial data for the project vicinity on March 8, 2010. California Department of Fish and Game, Sacramento, California.
- Elk Valley. 2009. Project data sheet for the *To-Gor's-No (Water) Project* for the Elk Valley Rancheria. Crescent City, California.
- Heald, Leslie S. 2002. Archaeological Survey of Martin Ranch, Crescent City, California. Center for Indian Community Development, Cultural Resources Facility, Humboldt State University.
- Howard, Chris. 2010. Personal communication with Chris Howard, Director Public Relation, Economic Development and Environmental Services, Elk Valley Rancheria. March 30, 2010.
- Howard, Chris. 2010a. Personal communication with Chris Howard, Director Public Relation, Economic Development and Environmental Services, Elk Valley Rancheria. March 18, 2010.
- Roscoe, James M and Janet P. Eidsness. 1986. *Archaeological Survey of Two Alternative State Prison Facility Sites Near Crescent City, Del Norte County, California*. Prepared for the California Department of General Services, Sonoma State University Academic Foundation, Incorporated.
- U.S. Census. 2010. Fact sheet for Crescent City, California based on the 2000 census at: <http://www.census.gov/>
- U.S. Fish and Wildlife Service (FWS). 2010. Accessed on March 8, 2010 of the following website: <http://www.fws.gov/arcata/specieslist/search.asp> to search for threatened or endangered species that have potential to occur in the Crescent City, California USGS 7.5 minute quadrangle.
- U.S. Bureau of Indian Affairs (BIA). 2003. *Elk Valley Rancheria, Stary Ranch Fee-To-Trust Environmental Assessment*. Prepared by Analytical Environmental Services. Sacramento, California.
- U.S. Bureau of Indian Affairs (BIA). 2006. *Final Environmental Impact Statement for the Elk Valley Rancheria Martin Ranch Fee to Trust and Casino Project*. Accessed at: <http://reports.analyticalcorp.net/elk-valley/martin-ranch/eis/feis/FEIS.htm>. Prepared by Analytical Environmental Services. Sacramento, California.

Appendix A

Photos of Project Area



Northern portion of Stary Ranch.
Gate access off of Elk Valley Road.



Southern portion of Stary Ranch.
Access road off of Howland Hill Road (right side of frame).



Southern portion of Stary Ranch.



Southern Stary Ranch with access road
off of Howland Hill Road in the frame.



Looking north at the southern portion of Sary Ranch.



Westside of access road off of Howland Hill Road,
southern portion of Sary Ranch.



Portion of southern Stary Ranch.



Looking northeast from U.S. 101 and access road to Martin Ranch.



Looking southeast from U.S. 101 and access road to Martin Ranch.



Martin Ranch.



Martin Ranch.



Martin Ranch.